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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,168	03/27/2006	Johan Haga	P17283USPC	2516
29078	7590	05/01/2007		
CHRISTIAN D. ABEL ONSAGERS AS POSTBOXES 6963 ST. OLAVS PLASS NORWAY, N-0130 NORWAY			EXAMINER WIEHE, NATHANIEL EDWARD	
			ART UNIT	PAPER NUMBER
			3745	
			MAIL DATE	DELIVERY MODE
			05/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/566,168

Applicant(s)

HAGA ET AL.

Examiner

Nathan Wiehe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 04182006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 18 April 2006 is noted. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because the abstract refers to the purported merits and the applications of the invention. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities:

Page 2, line 11 and page 7, line 14 refers to the claims.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Fan including a plurality of spaced fan bodies.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 includes the limitation "flow elements may be made straight and radial or straight and at an angle or curved and radial, forward or backward curved".

However, claim 21, from which claim 22 depends, establishes that the blades are curved forward.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14,16,23,24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Fowell (3,275,223). Fowell discloses a device including a shaft (40) and a plurality of fan bodies (24), although shown with apertures at their centers the fan bodies maybe continuous with the shaft (Fowell column 2, lines 13-15). The fan bodies (24) are radially extending disk with a void formed between two neighboring bodies. The fan bodies and shaft are housed within a tubular housing (34), integral with the fan mounting structure, having tangentially arranged inlets (20) and outlets (22).

In regard to claim 25, the limitation of the fan shaft being cut to the proper size is being treated as a product-by-process limitation. As set forth in MPEP 2113, product by process claims are NOT limited to the manipulations of the recited steps, only to the structure implied by the steps. Once a product appearing to be substantially the same or similar is found, a 35 U.S.C. 102/103 rejection may be made and the burden is shifted to applicant to show an unobvious difference. See MPEP 2113. Thus, even though Fowell is silent as to the process used to form the shaft, it appears that the product in Fowell would be the same or similar as that claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fowell (3,275,223). Fowell does not disclose that the length of the shaft and number of fan bodies is variable. However, it is well known in the art of blowers to vary the number of fan bodies and/or fan shaft length in order to produce a fan capable of meeting the required output capacity for a particular application. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Fowell by varying the length of the shaft or number of fan bodies to meet the output requirements of a particular application would have been considered a mere design consideration which fails to patentably distinguish over Fowell.

Claims 14,16-20 and 22, as far as it is definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over Spowage (1,546,323) in view of Leonard (1,328,679). Spowage teaches a device having a fan body (10) with flow elements (12) projecting from both radial faces of the fan body. The fan body is mounted within a tubular housing (1) including tangentially arranged inlets (6,7) and outlet (5). The fan body (12) is mounted to the shaft (2) at a right angle. The flow elements run for a first radius to an outer radius substantially equal to the outer point of the fan body. Spowage does not disclose the use of a plurality of fan body including a void there between. Leonard discloses a device including a plurality of spaced fan bodies (A) mounted to a shaft (B). The use of a plurality of fan bodies in Leonard provides a device with a higher output capacity. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fan of Spowage by including a plurality

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of spaced fan bodies as taught by Leonard for the purpose of increasing the output capacity of the fan.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spowage (1,546,323) in view of Leonard (13,28,679) as applied to claim 20 above, and further in view of Wagner et al. (5,536,140), hereinafter "Wagner". The modified invention of Spowage does not disclose the use of curved blades. However, it is well known in the art of blowers and fan to utilize curved blades for their improved airflow and reduced noise, as evidenced by Wagner (column 3, lines 15-22). Wagner shows curved blades (19) that extend from an inner radius at 90 degrees relative to the rotation direction and curve toward an outer angle. Further the use of a 50 degree exit angle would have been an obvious design consideration which fails to patentably distinguish the over Wanger.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents issued to Belomestnov and Dinh discloses fans including a plurality of spaced disk. The patent issued to Haraga et al. discloses a fan including a plurality of bladed disk.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Wiehe whose telephone number is (571)272-8648. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7am-4:30pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan Wiehe
Examiner
Art Unit 3745



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4/30/07